The Dental News.

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OPENING THE BITE WITH CAP-FILLINGS WITHOUT DESTROYING THE VITALITY OF THE PULPS OF THE TEETH.*

BY M. F. FINLEY, D. D. S.

I wish to present to your attention a case which has been of considerable interest to me in that I do not know of a similarly treated case, nor have I found in my limited consultations with brother practitioners any one who knows of a similar one, therefore I presume to ask your consideration of my statement of conditions and plan of procedure.

The patient—male—aged sixty-two years, every tooth present in upper jaw and all in regular position, with exception of left cuspid, which closed inside its opponent of the lower jaw, the four incisors were very much worn, so that the palatine surfaces presented a straight line or inclined plane from labio-incisive edge to palato-gingival line. These same incisors, when jaws were closed, came in contact with and pressed upon the lower gums. The bicuspids and molars of the left side showed some effect of mechanical abrasion, the outer cusps lapping pretty well over the outer or buccal side of the lower teeth opposite. The bicuspids and molars of the right side showing scarcely any wear at all.

On the lower jaw the first and second molars, right side, were lost, accounting for the last-mentioned condition in the upper jaw, at the same time throwing the work of mastication almost entirely upon the left side of the mouth, and in consequence causing the wear spoken of on the teeth of that side on the upper jaw, the lower teeth suffering more loss of tissue than the upper ones, and they also being, as it were, driven down into their sockets from the undue pressure, as appears in the model.

The lower incisors were worn to an inclined plane presenting a surface opposite that of the upper incisors, the plane running from the palato-incisive edge to the labio-gingival line, and the incisive edges impinging on the upper gums when teeth were closed.

My belief is that quite a good deal of the responsibility for the excessive wear of the teeth and the depressed condition of the lower teeth, left side, is due to the mal-position of the left upper cuspid—one of the main abutments of the arch being so misplaced as to offer no resistance to the settling together of the two jaws—whereas if the cuspid had been in its normal position, or had been forced there by regulating at the proper age, it would have been quite impossible for such a condition to have attained.

The contact of the front teeth with the gums opposite in closing the mouth, and the close proximity of the outer cusps of the upper molars of left side with the gums of the lower jaw, forcing the food in the process of mastication in painful contact with said gums, caused the patient so much discomfort that he sought relief, or at least advice as to what might be done to the best advantage to obtain same.

After taking impressions and getting models, my first thought or inspiration, if I may so call it, was to open the bite with cast or struck up slabs of metal, or cap-fillings, as I have decided to designate them. How to attach these cap-fillings was the question to be solved. In consulting several of my brother practitioners all at first seemed to oppose my plan as not being at all feasible. First thoughts or impressions are the most lasting, and there was no exception to the rule in this instance, as I persisted in my belief that a way could be found to attach these cap-fillings which would be satisfactory alike to patient and operator.

My reason for not crowning these teeth, as was advised by some, was that too much tooth-structure would have been sacrificed upon the approximal surfaces in preparing for such a procedure to satisfy my conscience; the teeth were not decayed or broken, but were worn down, also all

*Read before the American Dental Association, August 4, 1897.

the teeth had living pulps, and I was afraid to disturb the relation of the gums to the necks of the teeth as much as would have been required to have placed crowns over three adjourning teeth, with no teeth missing to afford easy access to any of the surfaces to be cut away.

Now for my plan of procedure.

The second bicuspid and first and second molars on left side, lower jaw, were restored or built up with these cap-fillings, and the second bicuspid and third molar, right side, lower, were crowned to carry a bridge to replace the lost first and second molars, the occlusion raised to correspond with the opened bite.

In prepration for these cap-fillings the occlusal surfaces of the teeth to be capped were ground so as to make them nearly a plane, though not absolutely so; then taking an impression in moldine and making die and counter with Melotte's metal, struck up pieces of nearly pure gold, about thirty-two gauge, to fit these ground surfaces, and drilling four holes in the molars and three in the bicuspid, punched holes in the little pieces of gold to correspond in position and soldered platinum pins in them, and then united to them cusps struck up on a die-plate and filled, thus making a cap of considerable thickness.

I ought also to say that the first piece of gold stamped to fit the tooth was thickened by a second piece stamped over the first and united to the first before the pins were soldered in. Twenty carat solder was used in fastening the pins and filling the cusps and the two pieces united with eighteen carat solder.

As to the location of the pinholes in the molars, I drilled them at a safe distance from the margins of the occlusal surface of the tooth in the centers of the four sides, by this means avoiding the cusps and thereby also the cornuae of the pulp, for, as before stated, all the teeth had living pulps.

As a result of my labors the second bicuspid and first and second molars of the left side, lower jaw, were raised with cap-fillings, the approximal surfaces of the teeth not being disturbed in their relations one with the other, and the second bicuspid and third molar of the right side made to carry an all gold bridge, thus raising the bite and restoring the lost masticating surface, preventing contact of the front teeth with the gums and opening the bite sufficiently to prevent pain during mastication. The cap-fillings were fastened with cement, as was also the bridge and all set at the same time so as to avoid irritation by pressure falling on a single tooth or on one side of jaw.

As an incident in connection with the construction of the bridge, when working on the third molar the patient related his experience in having had a gold filling put in on the buccal surface of this tooth by one of our late esteemed friends in New York City, which required a little more than an hour in the preparation of the cavity and insertion of the filling, and for which he paid two hundred and fifty dollars. Since that occasion he said he had often wondered for what purpose he had preserved this third molar as it was really not of much use to him, the two teeth in front of it having been lost, but now he realized why it had been preserved to advantage, because it enabled him to have this bridge put in, using the tooth as one of the abutments.

CARE AND NICETY IN HANDLING GOLD FOIL.

BY DR. J. H. P. BENSON, WASHINGTON, D. C.

Written for the NEWS.

One of the important features in the manipulation of gold foil is nicety and perfect cleanliness in handling. This not only applies to its preparation and insertion in the cavity, but also to the location in which it may be stored in our cabinet.

Gold foil should be so located in the cabinet as to be least exposed to any contamination with gases emanating from the medicine case. A drawer or space below, rather than aside or above the medicines, would be preferable.

We must also guard against stray particles of mercury coming in contact with foil. This is best done by keeping all amalgam instruments in an entirely separate compartment, away from the gold, gold pluggers, polishing stripes, disks, polishing powders, &c.

Amalgam instruments should be kept below, rather than above, where gold and instruments used for working it are located; for in being kept above there is a possibility of small particles of mercury adhering to the amalgam instruments becoming detached and falling in the compartments below and there lodging upon gold, pluggers, &c.

The chamois skin and pliers used in squeezing out excess of mercury from

amalgam, as well as the mercury itself, should not be kept in the cabinet. The observance of these simple precautions may save a great deal of worry and trouble in inserting and finishing gold fillings.

Should we be so unfortunate as to have mercury come in contact with a filling of gold as we are finishing it, a good way to correct the trouble is to immediately apply a single thickness of non-cohesive gold foil over the surface of the filling, burnishing this thoroughly against the spot where the mercury appears with a hot burnisher. Repeat this several times with a fresh piece of foil and afterwards polish, filling in the usual way. The idea embraced in this method is that the mercury may be at least partly withdrawn by its greater affinity for the soft piece of foil aided by the heat from burnisher.

Matches should not, under any circumstances, be kept in the dental cabinet, as the phosphorus fumes arising from them may seriously affect the working of our gold foil; and even when we have occasion to strike a match, it would be better to have all foil under cover.

In the preparation and manipulation of gold, we should be careful to avoid touching it with our fingers, or having anything come in contact with it that may interfere with the important properties of softness and cohesion.

To secure the best results in annealing, it is important that the foil should not be placed in the open flame of gas-burner or spirit lamp; a tray of mica should be used and the gold placed upon it and held over flame.

In arranging foil into the various forms for filling, it is desirable to avoid overhandling in order that the foil may retain that softness and smoothness which are so essential for its easy and proper manipulation. This is an important point and one which we should exert ourselves to retain.

There is quite a neat way of rolling gold foil into ribbons which I have used a number of years, though not original with me, that I think worthy of describing; not so much for the older members of the profession as for the young men just entering who may not know of it.

The only requisites necessary are a pad for rolling the gold upon and a foil spatula.

The pad is easily made. A piece of board, half an inch thick and six by eight inches in dimensions, is first covered on one side with a couple of thicknesses of velvet, or a single piece of heavy plush, this being covered over with a piece of chamois skin. This gives a nice soft surface which is admirably adapted for the purpose intended.

To fold the ribbons, the foil is cut into pieces of the desired size and laid flat upon the pad; the foil spatula is then placed with its edge against the foil and holding it at about a right angle to the same, and only pressing lightly, it is deftly drawn towards you, the gold rolling up and following in a neatly-rolled cylinder, which is flattened out into a ribbon by simply passing the flat side of the spatula over it.

A little practice will enable one to roll the foil into any desired width of ribbon. The advantage of this method is its neatness, rapidity, and the avoidance of overworking or handling the foil.

THE STUDY OF ANATOMY.*

BY W. C. BARRETT, M. D., D. D. S., M. D. S., BUFFALO, N. Y.

This association has wrought a great work in securing the adoption of something like uniformity of action in the admission of students, and in the raising of the general educational standard. If one would have some comprehension of its beneficent influence he has but to reflect upon what was the general character of American schools, and what their reputation abroad before the organization of the National Association of Dental Faculties, as compared with the present condition. And yet it has done but a small proportion of its manifest duty. Its accomplishments have been elementary.

It is not too much to say that our professional reputation must be what our colleges make it. We are the educators of those who are to be the leaders in the professional matters of the future. The next generation of dentists will be what we shall make it. Legislators may pass laws to regulate and restrict dental practice, but the stream can rise no higher than the fountain-head, and the practitioner of to-morrow must get his training and derive his professional knowledge from the school to-day. He must enter the profession by submitting himself to our guidance. The colleges are the fountain-head, and the stream will be limpid or foul according to whether we purify or contaminate it.

*Read by request before the National Association of Dental Faculties, Old Point Comfort, July 31, 1897.

This should be a proud position. It certainly is a responsible one, and woe betide the college professor who does not realize his accountability. The man who accepts the honor which may appertain to this distinguished station without striving his utmost to be in every way worthy of it, to fulfil every duty with an eye single to the best interests of student and profession, is unworthy a place in our ranks. He who assumes to arm the young men of our country for the battle of life, to fit them and equip them for an honorable career simply that he may minister to his own good, who takes the teacher's place and ascends the instructor's rostrum from selfish motives, is a worse hypocrite than the preacher whose every-day life belies his own sermons.

I believe that we are all sincere in desiring to make our schools, and through them the profession, all that they should be. To secure this it is not enough that we look solely to the preliminary qualifications of those whom we accept as candidates for a confidential position in American families. We need to make our instruction as perfect as possible. This cannot be done unless there is a generally accepted standard and some uniformity in system. At present one of our greatest sources of weakness lies in the fact that there is no common comprehension of a standard of methods. One school begins instruction with the alphabet, proceeds to the construction of simple words, and by regular gradations to the building up of sentences. Another commences by an analysis of the sentence into its component words, and then studies the elementary symbols constituting the words.

That is, one teacher is synthetical, and the other strictly analytical. A student takes his first and second year in one school, and then circumstances or inclination cause him to finish his course at another. He commences under analytical teachers and closes with a school that only arrives at the stage of analysis in the closing year. Hence, in reality that student never reaches the end of any regularly graded course. In this way the practical efficiency of that graduate can never be assured. Let me illustrate this by the various methods of arriving at a knowledge of that basal study in all schools that attempt to teach the healing art—anatomy.

Some teachers open their course with an examination of the elements of which the human body is composed. That is, they begin with histology. They commence with the cell, and after having given a fair knowledge of that, they proceed to construct the cells into tissues, which are then considered. Then the tissues are built into organs, and finally the organs into the systems which they compose, and they do not arrive at a consideration of the human body as a whole until the last year.

Another pursues the opposite course. He begins with a study of the anatomy as a complete system. He considers its functions, and then goes on to study the organs whose actions make function, and finally to the ultimate elements of which organs and tissues are composed, and whose aberrant functions afford the pathological disturbances with which it is to be his life's work to battle.

The student who spends his first year in a school that begins with histology, and who goes to one that ends its course with tissue elements, never gets beyond elementary matters in his entire college training. This certainly will not tend to make the best practitioners or to raise our profession to its highest point of efficiency. There should be a comprehension of the benefits of each method, a careful discussion of the merits of all systems of teaching, and an intelligent and discriminating adoption of that which is best. To this end I have accepted the invitation of the executive committee to bring this subject before you.

I am a believer in the analytical system. I think it is easier to arrive at an understanding by taking in pieces that which we do not construct, and thus get at a knowledge of the mysteries of that which we must attempt to repair. Let me give you my reasons for this faith, and then please allow me to listen while you show me wherein I am wrong, or confirm my prepossessions by your own corroborative testimony. Do not then understand me as speaking dogmatically when I propose the following methods in teaching anatomy, but only as offering suggestions.

Our sole reason for examining tissues and organs is that we may learn their action and function. Hence, we should begin with function. This requires that the preliminary examination should be of the system, and not of its organs. The study of anatomy, then, should commence with a general examination of the body as a whole. In a dental school the first year

should be devoted to general anatomy, beginning with osteology, or the framework. Then the viscera should be taken up, and their general morphology and function should be studied. This should be followed by myology, syndesmology, and neurology, that a fair idea of the whole body may be obtained. Practical anatomy should be commenced this term, and one extremity dissected. It has sometimes been urged that the student should not dissect until he has learned something of anatomy. This argument would be cogent if the object were to learn how to dissect. But we dissect to learn anatomy, and do not learn anatomy to discover how best to dissect.

All the study of this year should be general. Not a hint of any specialty should be given, and hence the teacher for this year is preferably a medical man. If he is a dentist he is apt to introduce his specialty too early. The general study of the human body should be finished in the freshman year.

In the second or junior year, the student begins to differentiate in his study. He should now take up regional anatomy. He has finished the study of the body as a whole. Not that he has learned all that he should, but he has devoted all the time that can be spared out of a three years' course, and he takes up the study of the part to which he is to devote his attention as a specialist. His field is bounded below by the clavicle, and he must have a special, definite, intimate knowledge of all above that.

As a part of this he commences the study of dental anatomy. The first step in this is comparative dental anatomy—that is, the study of the dental organs as a whole, precisely as he began the first year in general anatomy. The dentist who learns nothing of the general relations of teeth, and whose comprehension of them is only that they are organs out of which he is to pick his living, cannot claim any scientific knowledge. The teeth in all the different classes of animals should be generally studied until the dentition of man is reached, when his teeth should be intimately studied in all their anatomical relations. The anatomy of the second or junior year is, as a whole, devoted to organs, as is that of the first year to systems.

No man can finish the anatomical studies necessary to dental practice in two years. He imperatively needs the third year, and this should be given up to careful examination and investigation of tissues. In this year the microscope is a necessary adjunct. The student has now learned enough of function to comprehend how it modifies, or is modified by structural development. In this third and finishing year he does not entirely confine his attention to histological anatomy, but he continues regional anatomy, because he is not yet sufficiently familiar with the organs, especially of the head. He also bestows considerable attention upon surgical, and morbid, or pathological anatomy. But his chief attention is given to structural or histological anatomy, and he thus finishes his course by attention to the minutiæ and detail for which he is unprepared during his first or second year, because he has not then the general knowledge to allow him fully to comprehend it, and because his mind usually is not sufficiently trained and disciplined to give him mastery over his attention.

The student who thus advances by regular gradations each year, separately taking up and mastering a definite branch or part of the subject, will be likely to retain his knowledge, because he has advanced toward it by a direct route, and because each division is made subsidiary to the next, and there is a regular gradation and progress.

If such a system, or if some other regular system, can be adopted in its general features by all of our schools, the grading of one who for any cause changes his college during his course will be greatly facilitated, and he will not be likely to miss any of the subdivisions. Our graduates will be better qualified for practice, and the tone of the profession will be elevated.

I would pursue the same general plan in the study of chemistry and physiology, the other basal studies of the theoretical curriculum. They should extend through the entire course, the last year in each to be devoted to special instruction adapted to an exclusive dental practice.

Materia medica should begin with the first year, but therapeutics cannot be profitably commenced until the student has obtained some knowledge of drugs, and hence it becomes a second and third year study, materia medica extending over the first two years.

Embryology properly belongs to the second year, because its study demands an acquaintance with technical terms that are

all unfamiliar at the outset, and because it is an intricate and involved matter which requires a disciplined attention. Aside from these, there is no reason why it might not be begun with the freshman year.

Metallurgy is a second-year study, because its consideration demands a good acquaintance with general chemical laws, and these are acquired during the first year.

Surgery is a third-year study, because it demands not only a complete knowledge of anatomy, but a trained hand and absorbed attention as well. The student should begin the study of surgical pathology in the second year, and it may perhaps form a part of his general pathological studies.

Pathology should be differentiated from operative dentistry. They have very little in common, save that each may be curative. But operative dentistry is wholly mechanical and manipulative, while pathology should cover all medicinal and general treatment. Operative dentistry is largely prophylactic, while pathology is so to but a slight degree. Whatever has to do with the action of drugs, whether generally or topically applied, belongs to pathological practice. In the treatment of alveolar abscess, for instance, operative dentistry has very little part, its practice being confined to that which is mechanical, or that which is done with instruments. I believe that in the past we have not sufficiently distinguished between the two. A sharp line of demarkation should be drawn between that which is mechanical and that which is therapeutical.

It will be seen that I have not attempted to assign any place to the practical part of dentistry. My subject was the teaching of anatomy, but I have thought it not inappropriate to suggest some thought concerning other didactic studies.

Let me repeat that I have only considered the matter tentatively, and realize as fully as any of you that there is room for much consideration and extended discussion before the various studies in our curriculum shall each have been definitely assigned its appropriate place.

Patient bears the administration of cocaine much better early in the day, and after a hearty meal, than later on, when tired out and when several hours have elapsed since the taking of nourishment.

HELPFUL HINTS.

Cleanliness is a factor urged in practice.

Dryness is essential in all cavities to be filled.

One's own appearance has a great influence on success.

A vulcanite plate lined with gold gives a feeling of cleanliness to the mouth.

Always value your ability and skill, and charge your patient in accordance.

To prevent the annoyance of sticking stoppers in varnish bottles, coat them with glycerine.

Suction cavities should be used in but few cases; the plate should fit by adhesion of contact, atmospheric pressure.

It is certainly inspiring, entertaining, and instructive to listen to a professor delivering his lecture without manuscript. What a pity that more of our teachers do not follow this method.

Gutta-percha—an excellent filling material by the way—should be kept in glass bottles, tightly corked, in order to retain its fat, which is lost by evaporation through exposure, causing a deterioration in quality.

When making plates, where the teeth are scattered we often find one or more porcelain teeth quite loose, owing to the contraction of the vulcanite. To prevent this, bend the pinheads from each other, forming a wedge. To prevent pinheads showing through finished plate, bend them down toward face of model.

Spunk has an important station in the dentist's armamentarium. Often it is impossible to use a napkin in a child's mouth, and some will not tolerate the rubber dam. These are cases where spunk will be useful: cut it into narrow oblong pieces and use it pressed tight against the gum, slightly higher than the tooth to be operated on.

To test amalgam for discolorations, place a small piece in the shape of a button, having a smooth, polished surface, into a solution of forty grains of sulphuret of potash in one ounce of water and allow it to remain about twenty-four or forty-eight hours. Then remove and make your examination for any change of color.

GLEANINGS.

CAST FILLINGS.

BY DR. C. L. ALEXANDER.

My method consists, in detail, of burnishing platinum over the surface to be restored. The holes for retaining posts, having already been made, can easily be located and the posts adjusted therein. Then, by heating a little modeling composition over a spirit lamp and pressing it firmly down over the surface and allowing it to cool, we can remove the platinum sheet and posts in correct relation to each other. We now invest and solder the posts with pure gold. The piece is again placed upon the tooth in the mouth and, after carefully trimming and reburnishing, an impression is taken, and when an occlusion is needed, it is made at the same time by the patient closing the teeth together before the impression material has become hard. The metal foundation will be drawn out by the modeling compound when it is removed from the mouth. Each side of the impression thus secured is filled with any good investing material and placed in an articulator. After heating and removing the impression material you can restore the contour of the tooth by building up with wax. Over the wax surface thus formed we burnish gold or platinum foil; if the former, it should be very heavy, say, No. 60. A suitable portion of the wax being left uncovered, the work is cut away from the model and invested, with the exception of that part of the wax left uncovered by the metal. Through this opening all the wax is boiled out, leaving a matrix lined with metal, which acts as a carrier for the metal which is placed and fused within. I usually use twenty or twenty-two-carat gold solder for this purpose. When pure gold is used, of course, the matrix must be lined with platinum throughout. When removed from the investment, the casting is finished and cemented to its position on the tooth and there given a final finish. In bicuspids and molars, I frequently find it more convenient to stamp up the cusps, using pure gold, thirty-five guage, for this purpose, as it can readily be made to conform to the grinding surface of the occluding tooth.—*Cosmos.*

Subscriptions to the NEWS may be sent in at any time.

QUICKLY MADE MATRIX FOR CEMENT, AMALGAM, AND GUTTA-PERCHA FILLING.

BY DR. THEO. F. CHUPEIN, PHILADELPHIA.

Cut a piece of thin German silver plate, such as is furnished for matrices, about one-eighth of an inch wide, or narrower, and about one-half an inch larger than is necessary to encircle the bicuspid or molar tooth you may be about to fill. The rubber dam having been applied, the cavity prepared, and all things ready for the insertion of the filling, pass the strip of metal around the tooth, seizing the two ends with flat-nose pliers, and draw it up close to the tooth, in the same way as you would do if you were making a band for regulating purposes. When closely fitted remove it and heat the ends, and while hot place on one end a film of hard or adhesive wax. Now replace the band on the tooth, and by heating the noses of the flat pliers, the ends are again seized. The heat of the pliers melts the hard wax which was placed on the ends of the band matrix. The matrix is held with the pliers until the wax is thoroughly cold. When removed the matrix hugs the tooth closely, and the wax is sufficiently tenacious to hold it in place until any plastic filling may be inserted.—*Dental Off. and Lab.*

MIXING ALLOYS.

Dr. Black says: I do not care how you mix your alloys for filling, provided certain rules are employed. The first rule is this; the more tin you have the less trituration you should give it. The more silver you have the more trituration it demands, for the reason that the alloys with large proportions of tin dissolve in mercury much quicker than alloys with small proportions of tin. You should not manipulate or chop up your alloy in your cavity with your instrument. After you have once squeezed it out you want direct compression of it, hence fillings rubbed in with a burnisher are never so strong as fillings pressed in with a broad serrated point. Furthermore, I would say that I never wash amalgam.

A pledget of cotton dipped in a saturated solution of camphor in chloroform, placed for a few moments in the socket, will almost instantly afford relief after extraction. Remove as soon as pain ceases.—*D. W. Baker.*

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D. E. WIBER, M. D., D. D. S., EDITOR.

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EDITORIAL CHAT.

PHILANTHROPY'S CHANCE.

There are a number of wealthy philanthropists in this country who constantly make valuable financial contributions to science, to art, and to charity, but, singular as it may appear, the science of dentistry has been entirely overlooked by these lovers of mankind.

The conditions prevailing in the dental profession are similar to those found in medicine: scientific questions baffle disentanglement; diseases most common are subjects of diverse opinions; and why? Simply because the funds at our command to effect the needful investigations are generally meager and the workers are unable to continue their researches for fear of business or financial embarrassments.

The progress of oral surgery to the goal of an exact science has been hampered in no small measure by the lack of funds to carry on to a successful termination scientific researches in our ever-resourceful field.

We have abundance of capable workers who are ardent in their desire to obtain further knowledge of the materials used and the pathological conditions which confront them. We do not lack in this very important essential, and should feel more than passingly proud of the knowledge we have already achieved by personal hard work without assistance from outside sources.

In the study of antitoxine, of Koch's lymph, and many others of the serum form of medication—and these are mentioned because they are recent investigations—the government has come to the assistance of her investigators and has either appropriated sufficient money to allow them to accomplish the result, or has purchased the right to manufacture the same when it has proven a success. The necessary funds are, therefore, provided, whereby the searcher of the medical profession in the profound questions of life can continue his work without the annoyance and handicap of restricted funds.

Oh, if we could but induce some of the world's favored ones to subscribe liberally to a fund which had for its object the pursuance of dental investigations; what a impetus the whole profession would receive. We have in our own midst men who have accumulated fortunes. There are not many, possibly, and they may be living retired from active practice. The results, of course, would not personally benefit them, but the advantage to the calling they have pursued, and the assistance humanity would receive from their beneficence, would justly reward their philanthropy.

THE GIVING OF ADVICE.

The Italians have a proverb which says: "Give neither counsel nor salt till you are asked for it." If the advice were taken there would certainly be a number of happier people in the world. Strange that everybody is willing to give advice, and so few are ready to accept of it. We are determined to learn everything in the dear, costly school of experience, and even then we do not always profit by our failures.

CORRECTION.

In our last issue the report of the meeting of the National Dental Association stated that Dr. J. B. Rich, who acted as temporary chairman, served in a like position seventeen years ago, when the American Dental Association was organized. This is an error, and we take this method of correcting it.

In spite of the new tariff, amalgamation was smuggled through successfully. When that committee headed by those stalwarts, Drs. Thomas Fillebrown and B. Holly Smith, send in their bill for services rendered we fear the profession will be unable to liquidate promptly.

Few dentists have been put to the expense of purchasing life preservers as yet, although the wave of prosperity is doubtless approaching.

It is so pleasant and benefitting to be a member of a dental society; to receive the scorn and malice of some, and the compliments of others.

The dentist who considers self alone is of very little use to the dental community, and few tears are shed when he takes his final departure.

PERIDENTAL MEMBRANE.

The long-continued pressure of packing gold to make a large filling drives the blood somewhat from the peridental membrane, and the root of the tooth is driven more closely into its alveolar cell. The filling may be ground so as to just escape occluding force, or it may just touch an opposing cusp. Reaction setting in, the peridental blood supply is restored, perhaps increased—consequence, the tooth is elongated (apparently), the filling "strikes," and the patient may have a "sore" tooth, or the safety of the filling may be jeopardized.

NATIONAL ASSOCIATION OF DENTAL FACULTIES.

The fourteenth annual meeting of the National Association of Dental Faculties was held at the Hygeia Hotel, Old Point Comfort, Va., commencing Friday, July 30, 1897.

The following members of the association were represented, as noted below:

Alabama Dental College, Birmingham, Ala.—T. M. Allen.

University of California, Dental Department, San Francisco, Cal.—L. L. Dunbar.

Columbian University, Dental Department, Washington, D. C.—J. Hall Lewis.

Howard University, Dental Department, Washington, D. C.—A. J. Brown.

National University, Dental Department, Washington, D. C.—J. Roland Walton.

Atlanta Dental College, Atlanta, Ga.—William Crenshaw.

Dental Department of Southern Medical College, Atlanta, Ga.—S. W. Foster.

Chicago College of Dental Surgery, Chicago, Ill.—T. W. Brophy, Louis Ottofy.

Northwestern University Dental School, Chicago, Ill.—Theo. Menges.

State University of Iowa, Dental Department, Iowa City, Iowa—W. S. Hosford.

Louisville College of Dentistry, Louisville, Ky.—H. B. Tileston.

Baltimore College of Dental Surgery, Baltimore, Md.—M. W. Foster.

University of Maryland, Dental Department, Baltimore, Md.—F. J. S. Gorgas.

Boston Dental College, Boston, Mass.—J. A. Follett.

Harvard University, Dental Department—Thomas Fillebrown.

Dental College of the University of Michigan, Ann Arbor, Mich.—J. Taft.

University of Minnesota, Dental Department, Minneapolis, Minn.—W. P. Dickinson.

Kansas City Dental College, Kansas City, Mo.—J. D. Patterson.

Western Dental College, Kansas City, Mo.—D. J. McMillen.

Marion-Sims College of Medicine, Dental Department, St. Louis, Mo.—J. H. Kennerly.

Missouri Dental College, St. Louis, Mo.—A. H. Fuller.

University of Buffalo, Dental Department, Buffalo, N. Y.—W. C. Barrett.

New York College of Dentistry, New York City—F. D. Weisse, J. Bond Littig.

Cincinnati College of Dental Surgery, Cincinnati, Ohio—G. S. Junkermann.

Ohio College of Dental Surgery, Cincinnati, Ohio—H. A. Smith.

Western Reserve University, Dental Department, Cleveland, Ohio—George H. Wilson.

Pennsylvania College of Dental Surgery, Philadelphia, Pa.—C. N. Peirce.

Philadelphia Dental College, Philadelphia, Pa.—S. H. Guilford, Leo Greenbaum.

University of Pennsylvania, Dental Department, Philadelphia, Pa.—James Truman.

Tennessee Medical College, Dental Department, Knoxville, Tenn.—R. N. Kesterson.

Central Tennessee College, Meharry Medical Department, School of Dentistry, Nashville, Tenn.—G. W. Hubbard.

University of Tennessee, Dental Department, Nashville, Tenn.—J. P. Gray, L. G. Noel.

Vanderbilt University, Dental Department, Nashville, Tenn.—H. W. Morgan.

University College of Medicine, Dental Department, Richmond, Va.—L. M. Cowardin.

Royal College of Dental Surgeons, Toronto, Canada—W. E. Willmott.

The following schools were elected to membership:

Milwaukee Medical College, Dental Department, Milwaukee, Wis., represented by Reinhold E. Maercklein.

Tacoma Dental College, Tacoma, Wash., the constitution being signed by proxy by Dr. Kennerly.

New York Dental School, New York City, represented by John I. Hart.

Ohio Medical University, Dental Department, Columbus, Ohio, represented by J. F. Baldwin.

Baltimore Medical College, Dental Department, Baltimore, Md., represented by J. W. Smith and William A. Montell.

The application for membership of the University of Omaha, Dental Department, was laid over till next year, at the request of its officers.

Applications for membership were reported by the Executive Committee from the Pittsburg Dental College, Pittburg, Pa.; Dental Department of the College of Physicians and Surgeons, San Francisco, Cal.; Colorado School of Dentistry, Denver, Col.

The following report, laid over from last year, was adopted:

"Your committee on choosing a color respectfully report that they have decided to recommend the standard lilac as the distinctive dental color, and they recommend the adoption of the academic costume according to the requirements observed by the intercollegiate system."

The resolutions laid over from last year, making the annual college term seven full months, and recommending that the annual meetings be held in connection with the National School of Dental Technics, and at a time of the year when the colleges are in session, were negatived.

A committee, consisting of Drs. Henry W. Morgan, M. W. Foster, Theo. Menges, C. N. Pierce, and H. A. Smith, was appointed to meet a similar committee from the National Association of Dental Examiners, for the purpose of harmonizing the differences of opinion between the two associations. This committee reported rules which had been agreed upon by the two committees.

The report was discussed at length and again referred to the committee, which later reported, through the Executive Committee, a resolution, which was adopted, providing for the codifying and arranging of the existing rules of the association, and the preparation of such additional rules as may be deemed advantageous to both organizations in advancing the standard of dental education in the United States. On motion, the committee which had had the matter in charge in the conference was continued for this purpose.

A communication from the Dental Department of the State University of Iowa was received, asking consent of the association to its conferring the honorary degree on Dr. F. P. Weber, of Cherokee, Iowa. The request was declined on the ground that it is contrary to the practice of the association.

A similar communication from the University College of Medicine, Dental Department, Richmond, Va., asking the privilege of conferring the *ad eundem* degree on Dr. Thomas G. Cowardin, of London, Eng., was refused upon the same grounds.

The rule regarding preliminary qualifications adopted in 1896 was declared to have been adopted in an unconstitutional manner, and was therefore rescinded. The following was adopted in its place, and by unanimous consent was ordered to go into effect at once:

Resolved, That the minimum preliminary education requirement of a college of this asso-

ciation shall be a certificate of entrance to the first year of a high school or—in states that have no high school—of graduation from a grammar school, or its equivalent, to be determined by an examination.

Resolved, That nothing in the above shall be construed to interfere with colleges of this association that are able to maintain a higher standard of preliminary education.

A communication was read from Dr. W. Mitchell, president of the American Dental Club of London, requesting the appointment of a committee to co-operate with a similar committee in Europe for the purpose of securing just recognition of the diplomas issued by the colleges belonging to the association. The communication was favorably considered, and the president appointed as the committee Drs. W. C. Barrett, D. J. McMillen, S. H. Guilford, A. H. Fuller, and Faneuil D. Weisse.

The Ad Interim Committee reported that one new question decided by them during the year was that a student who was in arrears for fees could not be accepted by another college if objection was made by the college to which he was indebted. This ruling was sustained by vote of the association.

The committee also recommended that steps be taken to secure definite knowledge as to the curricula and requirements of foreign colleges, so that the members of the association should be able to decide upon the standing of students coming from them. Referred to the committee appointed to consider the matter of Dr. Mitchell's letter.

A paper prepared by Dr. W. C. Barrett, Buffalo, N. Y., at the request of the Executive Committee, and entitled "The Study of Anatomy," was read by its author.

The paper was, on motion, directed to be incorporated in the official report and copies sent to the journals for publication.

A committee consisting of Drs. S. H. Guilford, Theo. Menges, and M. W. Foster, was appointed to select persons to prepare papers on subjects connected with the work of the association, to be read before the next meeting.

Dr. Barrett offered the following, which was adopted:

Resolved, That the final vote upon the admission of a college to this association shall not hereafter be taken unless a duly certified and qualified delegate is in attendance.

The following resolution, offered by Dr. L. L. Dunbar, was adopted:

Resolved, That in order to maintain a reputable standing in this association no college under its jurisdiction shall permit any member of its faculty or teaching staff, board of trustees, or stockholders to serve in a judicial capacity as a member of a State board of examiners.

Dr. Taft offered the following, which was adopted:

Resolved, That a committee of three on curriculum be appointed, whose duty it shall be to compare the schemes of study of the various dental colleges, with the view of harmonizing these schemes and making them as nearly alike as practicable, to report next year.

The Committee on Text-Books recommended the following:

Essig's "American Text-Book of Prosthetic Dentistry."

Hodgen's "Dental Metallurgy."

Schafer's "Essentials of Histology," fourth edition.

Abbott's "Principles of Bacteriology," third edition.

Gray's "Anatomy," last edition.

Luff's "Manual of Chemistry."

Burchard's "Compend of Dental Pathology and Therapeutics."

The report was adopted, and the committee was instructed to examine Kirk's "American Text-Book of Operative Dentistry" and Marshall's "Injuries and Surgical Diseases of the Face, Mouth, and Jaws," and forward their views at the earliest possible moment to the secretary, in order that they may be incorporated in the printed transactions.

A committee, consisting of Drs. M. W. Foster, William Crenshaw, and L. G. Noel, reported appreciative resolutions on the death of Drs. Frank Abbott and Francis Peabody, late members, who have died since the last meeting was held. The resolutions were adopted.

The following lie over for final action till next year:

Offered by Dr. H. W. Morgan, seconded by Dr. H. B. Tileston:

Resolved, That on and after the session of 1899–1900, the regular sessions of each college belonging to this association shall be extended to four years.

Dr. J. Taft moved to amend the constitution to require application for membership to be sent to the secretary of the Executive Committee instead of to the secretary of the association.

Offered by Dr. T. Fillebrown:

Resolved, That no college connected with this association shall confer any degree as honorary which is usually granted in due course

of study and examination. All former rules on the subject are hereby repealed.

Offered by Dr. Barrett:

Resolved, That after the regular session of 1898-9 the annual college term for the members of the association shall be seven full months.

Dr. Crenshaw moved to strike out Rule 3 and adopt the following instead.

Resolved, That the time in which students can enter schools of this association shall be the first ten days of the session of the school, dating from the time announced in its catalogue.

The following were elected officers for the ensuing year: T. W. Brophy, Chicago, president; D. J. McMillen, Kansas City, Mo., vice-president; J. H. Kennerly, St. Louis, Mo., secretary; H. W. Morgan, Nashville, Tenn., treasurer. J. Taft, Cincinnati; Thomas Fillebrown, Boston, Mass.; B. Holly Smith, Baltimore, Md., Executive Committee. James Truman, Philadelphia; F. J. S. Gorgas, Baltimore; J. Hall Lewis, Washington, D. C., Ad Interim Committee.

The newly elected president, on being installed, announced the following appointments: J. A. Follet, Boston, Mass.; H. A. Smith, Cincinnati, Ohio; L. L. Dunbar, San Francisco, Cal.; J. D. Patterson, Kansas City, Mo.; W. T. McLean, Cincinnati, Ohio, Committee on Schools. S. H. Guilford, Philadelphia, Pa.; William Crenshaw, Atlanta, Ga.; W. C. Barrett, Buffalo, N. Y.; W. P. Dickinson, Minneapolis, Minn.; Faneuil D. Weisse, New York City, Committee on Textbooks. J. Taft, Cincinnati, Ohio; Edward C. Kirk, Philadelphia, Pa.; A. H. Fuller, St. Louis, Mo., committee to select subjects and essayists for next meeting.

Adjourned to meet at the call of the Executive Committee.

GUTTA-PERCHA FILLINGS.

To make moisture-tight gutta-percha fillings: Dry the cavity well, place in it a pellet of cotton saturated with absolute alcohol, remove the cotton and with a warm air syringe evaporate the alcohol, varnish the cavity with a solution of common resin in chloroform, warm the gutta-percha and pack with a cold instrument; heat a thin-bladed instrument and pare off the surplus gutta-percha; any further trimming or polishing required may be done with oil of cajeput.—*Review.*

HELP WANTED.

Will the editor or one of the many readers of the NEWS please favor me with a formula for the painless extraction of teeth; one which will produce no alarming after effects? If so, I will greatly appreciate same.

The NEWS comes as a most welcome visitor, and I find it full of good practical suggestions from beginning to end.

W. C. T., Overton, Tex.

(The base or active agent of most all local anesthetics is cocaine. It is usually combined with an antiseptic to prevent decomposition of the solution. Occasionally heart stimulants in small quantities are added to destroy the harmful influence of the cocaine on that organ. In using cocaine great care should be exercised, and stimulants should be close at hand in case of accident. We give the formula below, which we have prepared fresh whenever occasion demands its use.

℞	Cocaine Hydrochlor.....	grs. v
	Nitroglycerine.....	gr. $\frac{1}{50}$
	Atropinæ sulph	gr. $\frac{1}{100}$
	Listerine.....	
	Aq. dest.....*aa*.....	℥ ss.

M. ft. Sol. Sig: Inject from 10 to 15 minims.

If any of the readers of the NEWS have a better formula we would be pleased to hear from them. ED.)

ROOT AMPUTATION.

To amputate a root for the radical cure of chronic alveolar abscess, anesthetize the gum over site of root, take a circular trephine—such as is made by the dental manufacturing companies—place it in your engine hand-piece and with one or two revolutions cut through the gum process, after exposing the root, mount a fissure bur in engine and amputate the end of root by drilling at right angles to its axis, cleanse wound of all debris, wash with antiseptics, and pack with gauze.

In addition to most careful diet, of which excellent drinking water should form no small part, scurvy may be beneficially treated with nitrate of potassium.—*Keen.*

Mucous membranes can be made anesthetic by oil of cinnamon (one to five hundred).—*Therapeutic Gazette.*

When writing to advertisers in this journal please mention where you saw their "ad"—it will help you and help us.

BOOK REVIEW.

A MANUAL OF THE INJURIES AND SURGICAL DISEASES OF THE FACE, MOUTH, AND JAWS. By John Sayre Marshall, D. D. S. Seven hundred and sixteen pages; illustrated; with copious index. Price: cloth, $6; sheep, $7. Published by The S. S. White Dental Manufacturing Company, Philadelphia, Pa.

Dr. Marshall says this book is the outgrowth of several years' experience as a teacher in medical and dental colleges. It is intended as a "recitation" book, he being impressed with the disadvantages of the ordinary didactic methods. Each chapter is closed with a list of questions without answer, for the use of the student. It, of course, presupposes a knowledge on the part of the student of the anatomy and physiology of the parts to be studied, and the first section of the book is a careful résumé of the subject of surgical bacteriology. The "germ theory" of disease is as well set forth as we have seen it anywhere, and the student who wishes to be well up in this department has an opportunity for knowledge well condensed and clearly stated. The illustrations are excellent.

The chapter on "inflammation," its nature and treatment, is well written, and as condensed as may be, while those on "gangrene," "necrosis," "caries," &c., contain the most modern teaching. Probably the most interesting chapter is that on "carcinomata," although that on "tumors," especially those of the mouth, is valuable.

The book may not take the place of Garretson's, but it deserves the careful attention of teachers especially, who not infrequently need help in the selection of just what to teach, the selection of work in that direction being often perplexing. Of course the student of dentistry proper need not expect to find in the book anything to help him in his every-day work, as no dental surgery proper, in the sense in which that term is commonly understood, is taught. Teeth are not filled, extracted, or treated, not even Riggs' disease mentioned. It is a work outside of ordinary dentistry. It is a question whether the average dentist may have ambition to take up the practice of such surgery, indeed it is with many a question whether it had not better be left to the specialist, but the man who wants surgical work, and is ambitious to be a Marshall or a Garretson, has in this book ample opportunity to study the theory of such surgery as made these teachers famous. J. B. HODGKIN.

BUSINESS CHANCES.

Notices will be placed under this head on receipt of 25 cents per line one insertion, seven words to a line. *Money must accompany the notice.*

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WANTED.—A thoroughly competent operator would like a good location. Only those who have such need address H., DENTAL NEWS.

FOR SALE.—Fine opportunity. Office, and practice of $2,500 yearly; located on the principal business street of Washington, D. C. Large number of patients amongst Congressmen and public people. Price, $1,500 cash. *Speak quick.* Address, H. E. WRIGHT, DENTAL NEWS.

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